

ABSTRACT OF THE DISCLOSURE

The Stirling cycle engine includes: a casing having a cylindrical shape; a cylinder for slidably inserting a displacer and a piston into a part adjacent to one end and another part adjacent to an other end thereof respectively, the cylinder being coaxially placed inside the casing; a driving mechanism provided around an outer peripheral surface of the cylinder so as to force the piston to reciprocate inside the cylinder; a mount for fixing the driving mechanism to the outer peripheral surface of the cylinder, the mount being integrally formed with the cylinder; a flat spring having a center portion thereof connected to the piston; and a plurality of connecting arms, one ends thereof being integrally formed with the mount and the other ends thereof being connected to a peripheral portion of the flat spring. Since the cylinder, the mounts and the connecting arms are integrally formed with one another, precisions or accuracies such as alignment accuracy of the displacer or the piston relative to the cylinder, can be improved.